

ABSTRACT OF THE DISCLOSURE

HOSE SEPARATION TRANSMITTER SYSTEM AND METHODS

A hose separation transmitter system includes a shock sensor and a transmitter that are secured to the delivery hose. If the hose becomes disconnected, the shock sensor will generate a shock signal when the hose falls to the ground and the transmitter will respond to the shock signal by generating an encoded RF signal. A receiver at the vehicle receives the RF signal from the transmitter, determines that a hose disconnect has occurred, and automatically disables a fluid pump or closes a valve to stop the flow of fluid. The shock sensor preferably uses a strip of piezoelectric material. Related methods are also disclosed. For quick connect and disconnect, the shock sensor and transmitter are preferably secured to the hose by a hook and loop fabric material. The transmitter is immune to normal ambient vibration levels. Related methods are also disclosed.